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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,011	03/16/2004	Jean Bonnet	0514-1142	1583

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EXAMINER	
WEIER, ANTHONY J	

ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/801,011	BONNET ET AL.	
	Examiner	Art Unit	
	Anthony Weier	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) *10 and 11* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I in the reply filed on 4/12/05 is acknowledged. The traversal is on grounds as set forth on page 8 of Applicant's election filed 4/12/05. These arguments are not found persuasive. As set forth in the Restriction Requirement, the apparatus of Group II (including new claim 11) may be used for removing sugar from beets or sugar cane. In addition, the inventions have acquired a separate status in the art as shown by their different classification (method in class 426; apparatus in class 127).

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-9 are replete with elements that lack antecedent basis. Specifically, "the original fruit juice" (claim 1); "the twice-filtered permeate" (claim 1); "the retentate" (claim 1), "the ultrafiltration permeate" (claim 1); "the untreated original fruit juice" (claim 1); "the quantity of sugars eliminated" (claim 3); "the components" (both instances of claim 4); "the controlled addition" (both instances in claim 4); "the selective non-filtration operation" (claims 7); "the different operative phases" (claims 8 and 9); "the removal"

(claim 8); "the volume" (claim 9); "the original juice removed" (claim 9); "the beginning" (claim 9); and "the operative cycle" (claim 9).

In claim 1, it is not clear as to what is meant by "(PJO)", "(PNF)", "(PJON)", and "(PUF)". These abbreviations have not been defined in the original specification.

It is not clear whether claim 1 is limited to the treatment of grape juice only or fruit juice in general since both recited in lines 2 and 3.

In claim 1, the call to mix the twice-filtered permeate is confusing since a permeate has not been filtered twice, but rather, it is the juice has been filtered twice.

Claim 2 is indefinite in that it further broaden the closed language of claim 1. In particular, claim 1 excludes additional processing steps by use of the term "consists in" (line 3) whereas claims 2 employs the more open language "comprises essentially the steps....".

Claim 4 is indefinite in that it further defines an optional step in claim 1 without defining whether or not this optional step of claim 1 is actually positively included. This would be clarified by line 2 reading, for example, "characterized in that the treatment of the ultra-filtration permeate (PUF) *is employed and said treatment* consists in an operative step...."

The Markush Group of claim 4 (see lines 3 and 4) does not conform to the conventional language of "selected from the group consisting of".

In claim 4, it appears that the forth instance of (PUF) should be followed by a semi-colon and not a comma. Currently, it is not clear whether this Markush alternative ends and another begins. Also, it is not clear as to where the last Markush alternative

begins; it appears that a semi-colon is required after the words "one gellifying product" to correct this. The third to the last line of claim 4 is confusing and appears to be missing text (i.e. "components taking place in the or each phenomenon"). In addition, it is not clear whether claim 4 is limited by the examples of ion exchange resins or electrodialysis in the last Markush alternative or whether this Markush alternative is open to any "impoverishing" means that fulfills all other limitations of claim 4.

Claim 5 is indefinite in that it does not positively set forth implementing the Markush alternative of claim 4 regarding adding stabilizing product. This could be corrected, for example, by inserting –is- in line 3 between "product" and "added" and after ""(PUF)", inserting –wherein the at least one added stabilizing product-. Claim 5 is further confusing in that it is not clear whether the claim is limited to the particular examples of stabilizing product recited as examples.

Claim 6 is indefinite in that it is not clear as to whether a Markush group is being set forth. More specifically, "selected from the group formed by" is not conventional Markush language (i.e. "selected from the group consisting of"). In addition, claim 6 is indefinite in that it does not positively set forth the Markush alternative of claim 4 of adding a gellifying product". This could be corrected, for example, by inserting –is- in line 2 between "product" and "added" and, after "(PUF)", inserting –wherein the at least one gellifying product-.

Claim 7 is indefinite in that it sets forth an additional step not supported by the closed "consists of" language of claim 1.

Specification

3. The disclosure is objected to because of the following informalities: \

The specification is missing a brief description of the drawing. Also, it should be noted that the specification is broken down into "Description" and "Claims" sections with no other titles as suggested below. Such titles (which are applicable to the instant invention) would provide greater ease in navigating the specification.

Appropriate correction is required.

Content of Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
(e) BACKGROUND OF THE INVENTION.
(1) Field of the Invention.
(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(f) BRIEF SUMMARY OF THE INVENTION.
(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).
(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black, Jr. et al taken together with Gresch (U.S. Patent No. 5496577).

Black, Jr. et al. discloses a process (Figure 1) wherein grape juice (col. 2, line 6) is sequentially treated to an ultrafiltration step (4) producing a permeate (16) with lowered sugar (col. 3, lines 24-26) and a retentate (6) wherein the permeate is then processed via nanofiltration a permeate and a retentate wherein said retentate is further processed (as called for in instant claim 7. The permeate of the nanofiltration step (25) is then added to the retentate of the ultrafiltration step (14).

The claims further call for treatment of the ultrafiltration permeate to eliminate or limit crystallization therein. Black, Jr. et al discloses, for example, adding water at any time in the process to dilute any stream if desired (col. 4, lines 22-24), but is silent regarding doing so to the ultrafiltration permeate specifically and/or for the purpose of

avoiding crystallization within a stream. However, Gresch teaches adding dilution water to permeates to maintain the particular desired drinking strength of the final beverage to be processed. It is considered expected that by diluting said permeate, crystallization within same would be eliminated or avoided. It would have been obvious to one having ordinary skill in the art at the time of the invention to have included such step so as to preserve throughout processing the particular drinking strength desired in the final product.

Claims 2 further calls for adding a portion of the non-removed original juice to the ultrafiltration retentate and nanofiltration permeate. Although Black et al further discloses blending additional fruit juice with the ultrafiltration retentate/nanofiltration permeate mixture (col. 5, lines 17-20), there is no specific recitation that the original grape juice is to the additional fruit juice added in. However, absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time of the invention to have added in a portion of the original grape juice as a matter of preference depending on, for example, the particular taste desired in the final product.

Claims 3 further calls for controlling the volume of the ultrafiltration permeate. As discussed above, Black, Jr. et al discloses adding water at any time in the process to dilute any stream if desired, thus controlling the volume desired in any stream. However, there is no specific recitation to doing same to the ultrafiltration permeate. However, as set forth above, Gresch teaches adding dilution water to permeates to maintain the particular desired drinking strength of the final beverage to be processed.

It would have been obvious to one having ordinary skill in the art at the time of the invention to have included such step so as to preserve throughout processing the particular drinking strength desired in the final product.

Claim 8 calls for continuous processing of the various steps. Although it appears that Black, Jr. et al employs a continuous process, it is not specifically articulated. In the event that it is shown that Black, Jr. et al does not provide a continuous mode of operation, modifying a process to be continuous is notoriously well known and does not add patentability to the claims. It would have been further obvious to have incorporated same as a matter of preference within conventional modes of processing. See Dow v. Coe, 545 O.G. 905; In re Lincoln et al, 1942 C.D. 386, and In re Korpi, 602 O.G. 672.

6. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black, Jr. et al taken together with Gresch (U.S. Patent No. 5496577) further in view of Gresch (U.S. Patent No. 5110472).

Claim 6 calls for the addition of a gellifying agent to the ultrafiltration permeate. Although Black, Jr. et al is silent regarding same, it is known to add, for example, gelatin, to a processing stream prior to filtration as taught by Gresch (col. 4, lines 50-58) as a way to cause some macromolecules or colloidally dissolved parts which result in post clouding will not be allowed to pass through membrane filtration. It would have been obvious to one having ordinary skill in the art at the time of the invention to have added said gellying agent for such purpose.

7. Claims 1-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Black, Jr. et al taken together with Gresch (U.S. Patent No. 5496577) further in view of McArdle.

Claim 5 calls for the addition of a colloidal stabilizing agent to the ultrafiltration permeate. Although Black, Jr. et al is silent regarding same, it is known to add, for example, McArdle (col. 1, lines 45-64; col. 3, lines 11-28; col. 9, lines 17-34) as a way to clarify or to separate off undesired solid particles or dissolved substances contributing to undesirable organoleptic characteristics. It would have been obvious to one having ordinary skill in the art at the time of the invention to have added said stabilizing agent for such purpose.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anthony Weier whose telephone number is 571-272-1409. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anthony Weier
Primary Examiner
Art Unit 1761

Anthony Weier
July 15, 2005

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